

REMARKS

Claim 71 has been cancelled. Claims 1, 10-11, 13-14, 19, 21-23, 25, 27, 29, 32-33, 36-39, 41, 48-51, 55-57, 59-60, 68, 70, 72, and 73 have been amended. No new claims have been added. Claims 1-3, 5-8, 10-70, and 72-76 remain in the application. Applicant submits that all amendments are supported by the application-as-filed and that no new matter has been added.

Claims 41-58 stand allowed. Claims 10, 19, 20, 22-24, 60, and 68 stand Objected to, with indication that they would be allowable if presented in independent form. Claims 1-, 11-13, 18, 21, 25-35, 59, 61-67, and 69-76 stand rejected. Applicant appreciates the examiner's recognition of allowable subject matter in the respective claims.

Regarding the rejections, Applicant respectfully traverses the rejections, and submits that all of the claims are now allowable, in light of the foregoing amendments and the following remarks.

As an overview, all of the claims, for which the examiner has not indicated allowable subject matter, have been conformed to the allowed subject matter in either Claim 41 or Claim 68.

Rejections of Claims Under 35 USC § 102

Independent Claim 59, and its dependent Claims 67 and 69, stand rejected as being anticipated by Errico et al (U.S. Patent No. 5,876,402). Applicant respectfully traverses the rejection.

Nevertheless, in the interest of moving this case toward allowance, the allowable language of Claim 68 has been incorporated into independent Claim 59. Claim 59, as amended, thus recites said bone fastener...moving said retaining band from a first position to a moved position...[and]...said retaining band automatically, and as a consequence of the moving of said blocking structure past said retaining band, moving back toward the first position and thereby activating a blocking feature of said spinal plate assembly....

Applicant submits that no prior art of record teaches or suggests the invention claimed in Claim 59, whereby Claim 59 is allowable over the prior art of record. Claims 67 and 69 are allowable on their own merit, and also on the basis of their dependence from allowable Claim 59. Indeed, Claim 67 recites slots as the bone fastener receiving apertures. Errico et al do not teach any slot apertures. Withdrawal of the rejection, and allowance of Claims 59, 67, and 69 is respectfully requested.

Claims 1, 11, 12, 18, and 70-76 stand rejected under 35 U.S.C. §102 as being anticipated by Needham et al US 6,533,478. Applicant respectfully traverses the rejection. The examiner asserts that Needham et al teach a "resiliently movable retaining element (33)". Applicant respectfully disagrees. Needham teaches a movable washer 33. Needham says nothing about his washer being resiliently movable. Applicant submits that the examiner is not entitled to infer characteristics for an element where those characteristics are not at least inherent in the teachings of the reference. The examiner's statement that all materials inherently have resilient properties so long as they don't exceed Young's modulus, is not consistent with the use of such word in the art, or in Applicant's specification, or in the history of the application.

Rather, the art recognizes certain materials and structures as having a level, of resilient properties, which is useful in a contemplated implementation, while most other materials and structures do not have levels of resilient properties which are useful in the contemplated implementation. Applicant has made it clear in his specification that his contemplated implementation is for use as a back-out structure in cervical plates and other orthopedic implant devices.

In light of Applicant's specification, and Applicant's statements on the record, it is clear that Applicant uses the word "resilient" and its derivatives within the context of materials and structures which have useful "resilient" properties in the contemplated use implementation.

Still further, Applicant submits that the examiner's assertion that "Needham et al disclose an intermittent channel (39)" is without merit on its face. Applicant acknowledges that Needham et al discloses a channel 39. However, channel 39 is continuous along the entirety of the length of the plate. One might argue that the channel passes multiple apertures along the length of the plate, whereby the channel

"intermittently intersects" ones of the apertures. But intermittently intersecting the apertures is not at all the same as the channel being "expressed intermittently" along the length of the plate as stated in Applicant's claims. By the channel being "expressed intermittently", Applicant means that the channel exists intermittently. Namely there are longitudinal locations e.g. along the length of the plate where there is no channel.

By contrast, Needham's channel extends continuously from one end of the plate to the other end of the plate, and therefore plate existence, plate expression, is not intermittent.

Nevertheless, in order to move the case toward allowance, independent Claim 1 has been amended to include the limitations of subparagraph (b) of allowed Claim 41, whereby Claim 1 is allowable for the same reasons that Claim 41 is allowable, and is allowed.

Dependent Claims 11, 12, and 18 are allowable on their own merits, as well as on the basis of their dependence from allowable Claim 1. Withdrawal of the rejection, and allowance of Claims 1, 11, 12, and 18 are respectfully requested.

Independent Claim 70 has been amended to recite the language of Claim 68 wherein the examiner has indicated allowable subject matter. Claim 70, as amended, thus recites such retaining band moves from a first position...to a moved position...[and]...said retaining band automatically, and as a consequence of the moving of said blocking structure past said retaining band, moving back toward the first position and thereby activating a blocking feature of said spinal plate assembly....

Applicant submits that no prior art of record teaches or suggests the invention now claimed in Claim 70, whereby Claim 70 is allowable over the prior art of record. Withdrawal of the rejection, and allowance of Claim 70, and Claim 72 dependent therefrom, is respectfully requested.

Claim 71 has been canceled, rendering moot the rejection thereof.

Independent Claim 73 has been amended to incorporate the language of the limitations of subparagraph (b) in allowed Claim 41, whereby Claim 73 is allowable for the same reasons that Claim 41 is allowable, and is allowed. Dependent Claims 74 and 75 are allowable on their own merits, as well as on the basis of their dependence from

allowable Claim 73. Withdrawal of the rejection, and allowance of Claims 71, and Claim 73 dependent therefrom, are respectfully requested.

Rejections of Claims Under 35 U.S.C. § 103

Claims 2-8, 13, 20, 21, 25-35, and 61-66 stand rejected as being unpatentable over Needham et al '786. Applicant respectfully traverses the rejection.

Dependent Claims 2-8, 13, 20, 21, 25-35, and 61-66 are allowable on their own merits as well as on the basis of their dependence from the allowable claims from which they depend. For example, Claims 2-6 and 61-63 recite that the spinal plate and/or the retaining element comprises certain recited polymeric compositions. No reference of record teaches or suggests use of such polymeric compositions in spinal plates or spinal plate assemblies.

The examiner asserted that "to select a known material on the basis of its suitability for the intended use" is a matter of obvious design choice. Applicant submits that there is no evidence in the record to support the examiner's implied assertion that the recited polymeric materials were known to be suitable for the intended use, namely use in a spinal plate. Accordingly, the examiner's assertion is without basis and must be withdrawn; whereby all of the claims which recite polymeric materials are allowable. Withdrawal of the rejections, and allowance of all such claims is respectfully requested.

For example, Claims 20 and 25 recite first and second bands. The examiner asserts mere duplication of essential working parts involves only routine skill. Applicant submits that Claims 20 and 25 recite cooperation between the first and second retaining bands, not simply the presence of a second band. Therefore, the examiner's asserted "routine skill" argument is without merit and should be withdrawn.

For example, Claim 21, and also Claim 33, recite band retainer structure permanently secured to the spinal plate. An amendment in support of the use of the word permanently has been made in the specification at page 14 line 6. Such amendment is supported by the teaching of welding the band retainer to the spinal plate at, for example, page 14 lines 1-31, and elsewhere in the specification. Applicant

submits that welding is a permanent form of securement of the band retainer to the plate.

For example, Claims 34 and 35 recite that the band retainer structure is an integral part of said spinal plate.

By contrast, Needham teaches a screw 85 by which the washer is retained to the plate. Applicant submits that a screw is easily removed from the spinal plate, whereby screw 85, as a "retainer", is not an integral part of said spinal plate.

As with the earlier mentioned claims, Claims 28-29 recite that the channel is expressed intermittently along the length of the spinal plate. Applicant acknowledges that Needham et al discloses a channel 39. However, channel 39 is continuous along the entirety of the length of the plate and thus is expressed continuously, not intermittently. One might argue that the channel passes multiple apertures along the length of the plate, whereby the channel "intermittently intersects" ones of the apertures. But intermittently intersecting the apertures is structurally quite different from the channel, itself, being expressed intermittently along the length of the plate as recited in Applicant's claims. Needham's channel extends continuously from one end of the plate to the other end of the plate, and therefore is not intermittent as to the existence of its expression.

On page 6 of the Office Action, the examiner asserts that the head of the fastener in Errico et al can be considered a blocking structure. Applicant disagrees. Applicant respectfully points out that the diameter of the head of the fastener in Errico et al is smaller than the opening defined inside snap ring 180. Thus, in accordance with what Errico does in fact disclose/teach, the head of the fastener does not in any way interfere with, or inhibit, withdrawal of the screw through the aperture, whereby there is no blocking structure in Errico. The examiner asserted the existence of such blocking structure, but did not reference any specific blocking structure in Errico, whereby the examiner's assertion fails, and must be withdrawn.

Finally, the examiner's argument that all materials have a "resilient" element is immaterial to the discussion at hand regarding resilient movement of the retaining bands/retaining elements. Applicant teaches structures which exhibit a degree of resiliency which is effective to enable such structures to perform a specific task, namely

the task of blocking screw withdrawal. Such task requires a substantial overlap between the retainer band and the screw, sufficient that the screw cannot simply deflect around the retainer band. A nominal or inconsequential overlap, such as suggested by the examiner does not satisfy those objectives of the invention which are directed to preventing screw withdrawal from the spinal plate assembly. Indeed, Applicant has intentionally limited his own definition of "resilient" and "resiliency", e.g. in the previous paper mailed August 25, 2006, whereby the record is clear that the meaning of such recitation is limited to structures and classes of materials which exhibit such degree of resiliency as to exhibit such effective performance characteristics.

The examiner asserted that the retaining element (washer) of Needham et al "*will be deformed transversely as a fastener passes the retaining element. Once the fastener fully passes the retaining element, the retaining element will move towards but not "to" the first position because of the material properties*".

If Needham et al had taught materials or structures, or if Needham had taught functionality which represents such movement, (Applicant submits that Needham does not teach either property) Applicant could agree. But Applicant cannot. By contrast, Needham et al is quite clear that his washer moves longitudinally to cover, or uncover the apertures. Needham provides no insight into transverse movement of his washer. Rather, Needham provides a screw 85, and the channel/groove 39, which together intentionally restrict transverse movement of the washer. Indeed, the holes for screws 85 are located right beside the bone screw apertures, such that Needham's washer is actively prevented from moving transversely adjacent the apertures which receive the bone screws. Thus, Needham expressly and actively prohibits exactly the behavior which Applicant's invention performs so well. The examiner's assertion of Needham et al with respect to a transversely moving retainer/washer is thus without merit and must be withdrawn.

In light of the above amendments and remarks, Applicant submits that all bases of rejection and objection have been removed and/or overcome, whereby all of the claims now in the application are allowable over all references of record. Accordingly, Applicant respectfully requests withdrawal of all of the rejections and objections, and early allowance of all the claims.

A fee of \$400 is due to pay the fee for the 4 additional independent claims, namely Claims 10, 19, 60, and 68.


A check in the amount of \$400 is submitted herewith to pay the claims fee noted above. No other fee is believed to be due. Should any fee submitted herewith be insufficient, or should any other fee be properly due, or if any refund is due, kindly charge same, or credit any overpayment, to Deposit Account 23-2130.

Please feel free to contact me with any questions, any comments, any concerns, any suggestions for bringing this case to prompt conclusion, at the telephone number listed below.

Respectfully submitted,
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